

REMARKS

Submitted herewith is an excess claim fee payment letter for two excess total claims.

Claims 1-25 are all the claims presently pending in the application. Claims 1-13 and 15-21 have been amended to more particularly define the claimed invention.

While the claim amendments made herein may likely help to distinguish the invention over the prior art, Applicant's intention in making the amendments is for the purpose of particularly pointing out the invention, and not for the purpose of distinguishing the invention over the prior art, narrowing the claims, or for any statutory requirements of patentability. Further, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

Claims 1-4, 6, 8-11 and 13 stand rejected under 35 USC 112, second paragraph as being allegedly indefinite. Applicant notes that claim 2 has been amended to recite "wherein the horizontally rotating arms are extendable between the pair of upright support members", and claims 1, 3-4, 6, 8-11 and 13 have been amended to delete the term "means" in order to address the Examiner's concerns. Regarding claims 11 and 12, Applicant notes that claim 11 recites a "*placing position detector*" and a "*calculator*" and does not include "method steps" as alleged by the Examiner. In view of the foregoing, Applicant respectfully submits that these claims are clear and not indefinite, and respectfully requests that the Examiner withdraw this rejection.

Claims 1-2 stand rejected under 35 U.S.C. § 102(a) as being allegedly anticipated by Ito et al. (U. S. Patent No. 6,973,370).

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Genov et al. (U. S. Patent No. 6,489,741).

Claims 1-3 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Boyle et al. (U. S. Patent No. 4,746,256).

Claims 1-10, 13 and 23 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Ito in view of Genov.

Claims 1, 11-12 and 14 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Genov in view of Bacchi et al. (U. S. Patent No. 6,275,748).

Claims 15-22 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable

over Genov.

These rejections are respectfully traversed in view of the following discussion.

I. THE CLAIMED INVENTION

An exemplary aspect of the claimed invention (e.g., as defined by claim 1) is directed to a transporting apparatus, installed in a given clean environment, for transporting a plate from a predetermined takeoff position to a processing chamber. The apparatus includes a pair of upright support members standing at a predetermined interval, at least one horizontal support table liftably cantilevered on the pair of upright support members, a tilt adjuster including a tilt table formed on the horizontal support table; a lift driver for lifting the horizontal support table vertically, and a robot placed on the tilt table and having horizontally rotating arms for taking up and transporting the plate.

Importantly, the apparatus also includes a deflection compensator which controls a tilt angle of the tilt table with respect to the horizontal support table to compensate for deflection of the rotating arms (Application at Figures 7B and 11; page 26, lines 1-10; page 31, lines 11-17). This may allow the invention to accurately compensate for a deflected amount (Application at page 31, lines 11-17).

II. THE ALLEGED PRIOR ART REFERENCES

A. Ito and Genov

The Examiner alleges that Ito teaches the claimed invention of claims 1-2, and Genov teaches the invention of claim 1, that Genov makes obvious the invention of claims 15-22, and that Ito would have been combined with Genov to form the invention of claims 1-10, 13 and 23. Applicant submits, however, that these references would not have been combined and even if combined, the alleged combination would not teach or suggest each and every element of the claimed invention.

In particular, Applicant respectfully submits that these alleged references are unrelated. Indeed, no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the references provide no motivation or suggestion to urge the combination as alleged by the Examiner and there exists no other rationale to urge

the combination to support the alleged combination. Indeed, these references clearly do not teach or suggest their combination. Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

Moreover, neither Ito, nor Genov, nor any alleged combination thereof teaches or suggests *"a deflection compensator which controls a tilt angle of the tilt table with respect to the horizontal support table to compensate for deflection of the rotating arms"*, as recited for example, in claim 1, and similarly recited in claims 15 and 20 (Application at Figures 7B and 11; page 26, lines 1-10; page 31, lines 11-17). As noted above, this may allow the invention to accurately compensate for a deflected amount (Application at page 31, lines 11-17).

Clearly, Ito and Genov do not teach or suggest these novel features.

Indeed, the Examiner expressly concedes on page 8 of the Office Action that Ito does not teach or suggest a tilt adjuster formed on a horizontal support plate. However, the Examiner alleges that Genov teaches this feature. This is completely unreasonable.

Indeed, Genov simply teaches a substrate carrying global positioning robot (GPR) which includes a platform 36 that is supported on supports 37, 39 and can be tilted by moving the supports in the Z direction at different rates (Genov at col. 4, lines 35-43; Figure 7). The Examiner attempts to equate the platform 36 in Genov with the horizontal support table of the claimed invention.

However, nowhere does Genov teach or suggest a tilt adjuster including a tilt table formed on the horizontal support table, or a robot placed on the tilt table and having horizontally rotating arms for taking up and transporting the plate. Thus, Genov certainly does not teach or suggest a deflection compensator which controls a tilt angle of the tilt table with respect to the horizontal support table to compensate for deflection of the rotating arms, as in the claimed invention.

Thus, Genov clearly does not make up for the deficiencies in Ito.

Therefore, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

B. Boyle

The Examiner alleges that Boyle teaches the claimed invention of claims 1-3. Applicant submits, however, that there are features of the claimed invention that are not taught or suggested by Boyle.

In particular, Boyle does not teach or suggest "*a deflection compensator which controls a tilt angle of the tilt table with respect to the horizontal support table to compensate for deflection of the rotating arms*", as recited for example, in claim 1, and similarly recited in claims 15 and 20 (Application at Figures 7B and 11; page 26, lines 1-10; page 31, lines 11-17). As noted above, this may allow the invention to accurately compensate for a deflected amount (Application at page 31, lines 11-17).

Clearly, Boyle does not teach or suggest these novel features.

Indeed, the Examiner attempts to equate the threaded shaft 226 in Figure 12 of Boyle with the tilt adjuster of the claimed invention. However, nowhere the threaded shaft 226 clearly does not include a tilt table as in the claimed invention. Thus, Boyle certainly does not teach or suggest a tilt adjuster including a tilt table formed on the horizontal support table, or a robot placed on the tilt table and having horizontally rotating arms for taking up and transporting the plate. Moreover, Boyle certainly does not teach or suggest a deflection compensator which controls a tilt angle of the tilt table with respect to the horizontal support table to compensate for deflection of the rotating arms, as in the claimed invention.

Therefore, Applicant submits that Boyle clearly does not teach or suggest each and every feature of the claimed invention. Therefore, Applicant respectfully requests that the Examiner withdraw this rejection.

C. Bacchi

The Examiner alleges that Genov would have been combined with Bacchi to form the invention of claims 1, 11-12 and 14. Applicant submits, however, that these references would not have been combined and even if combined, the alleged combination would not teach or suggest each and every element of the claimed invention.

In particular, Applicant respectfully submits that these alleged references are unrelated. Indeed, no person of ordinary skill in the art would have considered combining

these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the references provide no motivation or suggestion to urge the combination as alleged by the Examiner and there exists no other rationale to urge the combination to support the alleged combination. Indeed, these references clearly do not teach or suggest their combination. Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

Moreover, neither Genov, nor Bacchi, nor any alleged combination thereof teaches or suggests *"a deflection compensator which controls a tilt angle of the tilt table with respect to the horizontal support table to compensate for deflection of the rotating arms"*, as recited for example, in claim 1, and similarly recited in claims 15 and 20 (Application at Figures 7B and 11; page 26, lines 1-10; page 31, lines 11-17). As noted above, this may allow the invention to accurately compensate for a deflected amount (Application at page 31, lines 11-17).

Clearly, Bacchi does not teach or suggest these novel features.

Indeed, Bacchi simply teaches a robot arm system 308 mounted on and through an aperture in the top surface of a support table 309 (Bacchi at Figure 15A; col. 16, lines 9-13). That is, like Ito, Genov and Boyle, nowhere does Bacchi teach or suggest a tilt adjuster including a tilt table formed on a horizontal support table, or a robot placed on the tilt table and having horizontally rotating arms for taking up and transporting the plate. Thus, Boyle certainly does not teach or suggest a deflection compensator which controls a tilt angle of the tilt table with respect to the horizontal support table to compensate for deflection of the rotating arms, as in the claimed invention.

Thus, Bacchi clearly does not make up for the deficiencies in Genov.

Therefore, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-25, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

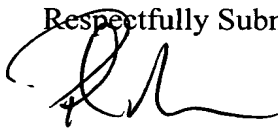
Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Date:

8/25/10

Respectfully Submitted,



Phillip E. Miller, Esq.
Registration No. 46,060

McGinn IP Law Group, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254